



LEAPFROGGING ACROSS MILES OF SATURATED GROUND

COST-SAVING APPLICATION OF CONSTRUCTION MATS IMPROVES ACCESS AND EFFICIENCY



Entergy® is an integrated energy company that delivers electricity to 2.9 million utility customers in Arkansas, Louisiana, Mississippi, and Texas.



Saturated grounds and limited access leads to a creative matting plan.

SITUATION

Faced with the need to support the ever-growing population in south Louisiana, Entergy was constructing a new double-circuit 230kV transmission line to connect a new distribution substation in Robert, Louisiana. During a nine-month period of torrential rains, the project extended over approximately 16 miles of protected wetlands. Sterling was called on to install access mats and work pads with limited access to the ROW over the duration of the project.

CHALLENGE

Southern Louisiana contains water-saturated coastal and swamp regions that help protect against storm surges. From the outset of the project, crews were contending with areas that had experienced more than 60 inches of rain. As a result, the highly saturated ground made moving construction equipment and materials difficult and potentially dangerous. The team needed to create a new 125-foot ROW in this setting where the transmission line did not directly parallel the existing transmission line. The new 230kV line was offset 75 feet from the tower to ensure safe working clearances between transmission lines.



RESULTS

Working closely with the Entergy construction team, Sterling crews devised a system for laying 12,000 TerraLam 300 cross-laminated timber (CLT) mats to provide a solid and stable temporary road for access through designated wetlands to the area where the new Robert substation was being built.

Construction of the new transmission line began at the new substation and extended about 16 miles to the Fairfield substation. As construction on the line was completed, the Sterling team moved the mats to the second half of the ROW, also known as leapfrogging.

With the saturated ground, the TerraLam 300 mats were critical for preventing compaction and improving site safety. Despite daunting conditions and limited access points to the ROW, Sterling's site access experts were able to keep this project moving efficiently and remain on schedule.

